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IN THE CLAIMS:

The status and content of each claim follows.

1. (previously presented) A method of driving a parallel-plate variable micro-electromechanical capacitor, comprising:

establishing a first charge differential across a first and a second conductive plates of said variable capacitor wherein said first and second conductive plates are biased to a relative position and separated by a variable gap distance, and wherein said first charge differential causes relative movement between said conductive plates against said bias to narrow said variable gap distance;

isolating said first and second plates for a first duration; and

decreasing said charge differential to a final charge differential being less than said first charge differential and wherein said second charge differential also causes attraction between said conductive plates against said bias and corresponds to a second value of said variable gap distance which is smaller than a gap distance between said conductive plates corresponding to said biased relative position.

2. (original) The method of claim 1, further comprising isolating said first and second plates for a second duration after decreasing said charge differential.

3. (original) The method of claim 2, wherein isolating said first and second plates for said second duration allows said first and second plates to mechanically settle to said second value of said variable gap distance.

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4. (original) The method of claim 1, wherein establishing said first charge differential comprises coupling said first conductive plates to a reference voltage source and coupling said second conductive plate to a clear voltage.

5. (original) The method of claim 4, wherein said clear voltage comprises a second clear voltage coupled to said second conductive plate and wherein decreasing said charge differential comprises coupling said first conductive plate to a first clear voltage.

6. (original) The method of claim 1, wherein said first charge differential causes an initial attractive force between said first and second conductive plates that is larger than a second attractive force corresponding to said second value of said variable gap distance.

7. (original) The method of claim 1, wherein said parallel-plate variable MEM capacitor comprises a diffraction-based light modulation device.

8. (previously presented) A method of driving a diffraction-based light modulation device (DLD), comprising:

establishing a preliminary known charge state with respect to a first and a second conductive plate of a variable capacitor wherein said first and second conductive plates are separated by a variable gap distance;

establishing a first charge differential across said first and second conductive plates to force said first and second conductive plates toward each other;

isolating said first and second conductive plates for a first duration;

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decreasing said charge differential to a second charge differential that also forces said first and second conductive plates toward each other, but said second charge differential being less than said first charge differential and wherein said second charge differential corresponds to a second value of said variable gap distance; and

isolating said variable capacitor for a second duration to allow said first and second plates to settle to said second value of said variable gap distance.

9. (original) The method of claim 8, wherein establishing said known charge state comprises coupling said first conductive plate to a first clear voltage and coupling second conductive plate to a second clear voltage.

10. (original) The method of claim 8, wherein said first and second conductive plates are at substantially similar voltage levels.

11. (original) The method of claim 8, wherein said first and second clear voltages comprise different voltage levels.

12. (original) The method of claim 8, wherein establishing said first charge differential comprises coupling said first conductive plate to an overdriven reference voltage source.

13. (original) The method of claim 8, wherein decreasing said charge differential comprises removing a selected amount of charge from said first conductive plate.

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14. (previously presented) The method of claim 13, wherein removing said selected amount of charge comprises coupling said first conductive plate to an overdrive compensation voltage for a determined period of time.

15. (original) The method of claim 8, wherein said variable capacitor is controlled by a voltage control circuit.

16. (original) The method of claim 8, wherein said variable capacitor is controlled by a charge control circuit.

17-28. (cancelled)

29. (currently amended) A method of operating a micro-electromechanical device comprising first and second plates that are capable of relative movement to vary a width of a gap between said first and second plates, and wherein said first and second plates are biased to a relative position with a first gap width therebetween said plates, said method comprising:

applying a voltage difference to said two plates, said voltage difference creating an attractive force against said bias that narrows said gap between said two plates, wherein said voltage difference is greater than a second voltage difference corresponding to a desired second gap width value, said voltage difference that is higher than said second voltage difference being applied to accelerate relative movement between said two plates to produce said desired second gap value width between said plates; and,

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after applying said voltage difference, reducing said voltage difference between said two plates to said second voltage difference corresponding to said desired second gap value width, wherein said second gap width is less than said first gap width ~~a gap value~~ corresponding to said relative position.

30. (currently amended) The method of claim 29, further comprising reducing said voltage difference between said two plates to said second voltage difference before movement between said two plates reaches said desired second gap width ~~value~~.

31. (previously presented) The method of claim 29, wherein said second plate is fixed and said first plate moves relative to said second plate.

32. (previously presented) The method of claim 29, further comprising:  
charging a node electrically disconnected from said two plates prior to applying said voltage difference; and  
electrically connecting said node with at least one of said plates to apply said voltage difference.

33. (previously presented) The method of claim 32, further comprising electrically isolating said two plates after applying said voltage difference by opening a switch between said node and at least one of said plates.

34. (currently amended) The method of claim 33, wherein said reducing said voltage difference is performed selectively electrically connecting at least one of said plates

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with a second node which is held at said second voltage corresponding to said desired second gap width value.

35. (currently amended) The method of claim 29, wherein said desired second gap width value corresponds to a desired capacitance between said two plates, said two plates being a variable capacitor.

36. (currently amended) The method of claim 29, wherein said desired second gap width value corresponds to a wavelength of light to be output by a diffractive light device, said diffractive light device comprising said two plates.

37. (new) The method of claim 29, further comprising, once said second voltage difference is applied, applying said second voltage difference until said gap between said first and second plates narrows to said desired second gap width.